

Application No. 09/538,617

3,689,079). Claims 3-5 have been rejected under 35 USC § 103(a) as allegedly being unpatentable over Margrain in view of Karol (U.S. 3,650,021). Claim 8 has been rejected under 35 USC § 103(a) as allegedly being unpatentable over Margrain in view of Toshiba (JP 05328678A). Claims 11-12 have been rejected under 35 USC § 103(a) as allegedly being unpatentable over Margrain in view of Angele (U.S. 3,209,187). Although Applicants do not necessarily agree with the Examiner's rejections, these claims have been canceled without prejudice to possibly pursue at a later date. Accordingly, these rejections are moot.

Applicants' attorney appreciates the courtesies extended by the Examiner in a recent interview on December 17, 2001. During that interview, the concept now recited in claim 30 was discussed. The Examiner acknowledged that this concept appeared to be patentable over the cited references indicating that a further search would be required before a Notice of Allowance could issue. Accordingly, Applicants respectfully submit that claim 30 is directed to patentable subject matter.

Claims 31-46 are also patentable over the cited references by virtue of their dependency on claim 30, as well as their respective limitations recited therein. By way of example, claim 34 recites "a non-conductive filament wrapped around the outer surface" of one of the winding portions. None of the references recited by the Examiner disclose or suggest this concept. Karol discloses a printed circuit armature having copper traces laminated to a layer of fully cured epoxy-fiberglass. The epoxy-fiberglass is a composite structural material of plastic and matted fiberglass threads. This is quite different from a filament wrapped around the outer winding portion of Applicants' induction coil.

Claim 37 recites an induction coil wherein the "spaces separating the conductive bands is less than 1.5 times the thickness" of the conductive bands. This ratio cannot be achieved with conventional

Application No. 09/538,617

printed circuit technology. With conventional printed circuit technology, the etching process is performed from one side of the conductor resulting in a separation between the conductive bands on the order of 2.5 to 3.0 times the thickness of the conductor. With Applicants' structure, the etching process can be performed from both sides of the conductor thereby significantly reducing the spaces between the conductive bands for a given conductor thickness.

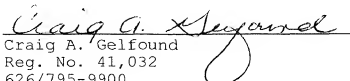
Claim 43 recites an inductive coil having "an electrically insulated metal flywheel." By way of example, an aluminum flywheel with an anodized exterior surface as recited in claim 45. This approach reduces armature failure due to over-heating experienced by prior art induction motors. Heretofore, flywheels have been constructed with an electrically insulating material to prevent short circuiting the coil. This electrically insulating material, however, is generally a poor thermal conductor often times severely limiting the power capabilities of the armature. Applicants' approach provides a metal flywheel for rapid heat dissipation with an electrically insulating material on the exterior surface to prevent short circuiting of the coil.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By


Craig A. Gelfound
Reg. No. 41,032
626/795-9900

CAG/cea

CEA PAS403832.1--12/26/01 11:32 AM